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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------------|------------------|
| 09/942,842 | 08/31/2001 | Masataka Aoki | 381NP/50366 | 8533 |
| 7590 04/05/2004 | | | | |
| CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300 | | | EXAMINER PALABRICA, RICARDO J | |
| | | | ART UNIT 3641 | PAPER NUMBER |

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 09/942,842 | | AOKI | |
| | Examiner | | Art Unit | |
| | Rick Palabrica | | 3641 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's 3/5/04 After-Final Reply, requesting reconsideration of the 12/10/2003 final Office Action, is acknowledged. In response to Applicant's request, the Examiner withdraws the said Office Action and replaces it with this one.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 3 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter not properly described, as filed, pertains to the "variable arm length guide."

In Applicant's 10/29/03 amendment, which formed the basis of the now withdrawn 12/10/03 final Office Action, applicant amended claim 1 to include the limitation, "a guide with a variable arm length for guiding the nuclear reactor vessel through the penetrating path." In the Remarks section of said amendment, Applicant identified this so-called "variable arm length guide" as structure 15 (see page 3, last

paragraph). The original specification discloses a guide 15 constituting a pulley 15 a, which is anchored to protective wall 12 by a connecting structure 14 (see Fig. 5 and page 12, last paragraph of the specification). Neither one of the structures 15a, 14 or 12 has a "variable length" because they are depicted as having fixed dimensions or fixed mounting configuration.

3. Claims 1, 3 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There is neither an adequate description nor enabling disclosure as to how and in what manner the guide 15, which has fixed dimensions or fixed mounting configuration can have a variable arm length. There is also no support as to what is encompassed by the term, "variable arm length."

4. Claims 1, 3 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague and indefinite, and their metes and bounds cannot be determined, for the reasons given in section 3 above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Masakata Aoki (H11-311693), who discloses a method of removing a reactor pressure vessel through a roof of reactor building, with the aid of a crane

Applicant's claim language reads on the Aoki et al. invention as follows: a) "protective measure for a used fuel pool" reads on the combination of either the shield body 27, hanging balance 33 and hanging wire 29b (see Fig. 11) or the combination of the shield body 27, seal curtain 36a, hanging balance 33 and hanging wire 29b (see Fig. 19; and b) "guide with variable arm length" reads on hanging wire 29 which has a variable length because its length varies depending on the position of the pressure vessel during its removal from the reactor building 4. Note that the Aoki's protective measure provides a protection for the spent fuel pool 19 because it encloses the reactor pressure vessel 1 while the latter is being removed from the reactor building. As per the claim language, the roof of the nuclear plant in Aoki's invention is above an operating floor (above the reactor well 9) and forms an upper face of a sidewall of spent fuel pool 19 (see Fig. 2).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki, as applied to claims 1 and 13 above, and further in view of either one of Beirle (3,754,140) or Hausholder et al. (U.S. 3,982,134). Aoki discloses the applicant's claims except for a cushioning member provided with the protective measure.

Either one of Beirle or Hausholder et al. teaches the use of a cushioning member as part of and within a separate enclosure for containers of radioactive materials (e.g., nuclear fuels). See Fig. 3 and column 3, lines 32+ in Hausholder et al., or Fig. 3 and column 4, lines 34+ in Beirle.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus, as disclosed by Aoki, by the teaching in either one of Beirle or Hausholder et al., to include a cushioning member inside a protective measure for a pressure vessel, to gain the advantages thereof (i.e., provide concussion protection), because such modification is no more than the use of a well-known expedient for protection of nuclear components being moved within the nuclear art.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki.

As to the limitation in the claim regarding providing the protective measure with a cushioning member, this is either: a) a matter of optimization within prior art conditions or through routine experimentation (see MPEP 2144.05II.A); or b) obvious over Aoki because one would always provide a cushioning element to minimize damage due any interaction between a container and a contained component during its transport or movement.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

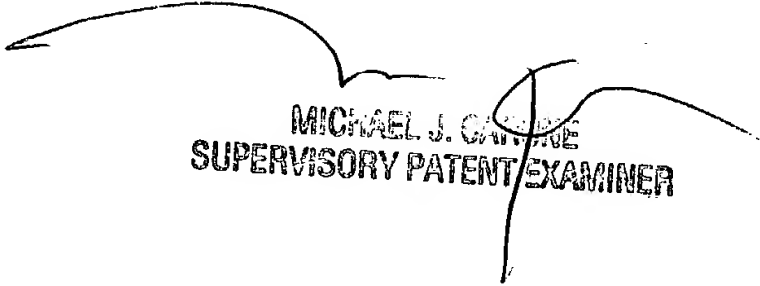
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 703-306-5756. The examiner can normally be reached on 7:00-4:30, Mon-Fri; 1st Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJP
March 29, 2004



MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER